

DATA HIDING THROUGH ARRANGEMENT OF OBJECTS

Abstract of the Disclosure

5 The present invention provides steganographic embedding techniques. A digital watermark signal is reduced to a set of spatial positions. The set of spatial positions sufficiently conveys the digital watermark signal. Message objects are positioned according to the set of spatial positions. Non-message objects are combined with the message objects to form an image or design. The message objects include distinguishable characteristics, e.g., via color, contrast, gray-scale level
10 or luminance, in comparison to the non-message objects. The digital watermark signal is detected by distinguishing the message objects from the non-message objects (e.g., via color or contrast differences) and analyzing the relative placement of the message objects within the image or design.